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THE PHYSICAL ASPECTS OF URBANIZATION, PHYSICAL CONSIDERATIONS  
IN COMMUNITY ACTION. KANSAS STATE UNIVERSITY SHORT COURSE  
SERIES IN PLANNING AND DEVELOPMENT, 5.

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KANSAS STATE UNIV., MANHATTAN, AGR. AND APPL. SCI.

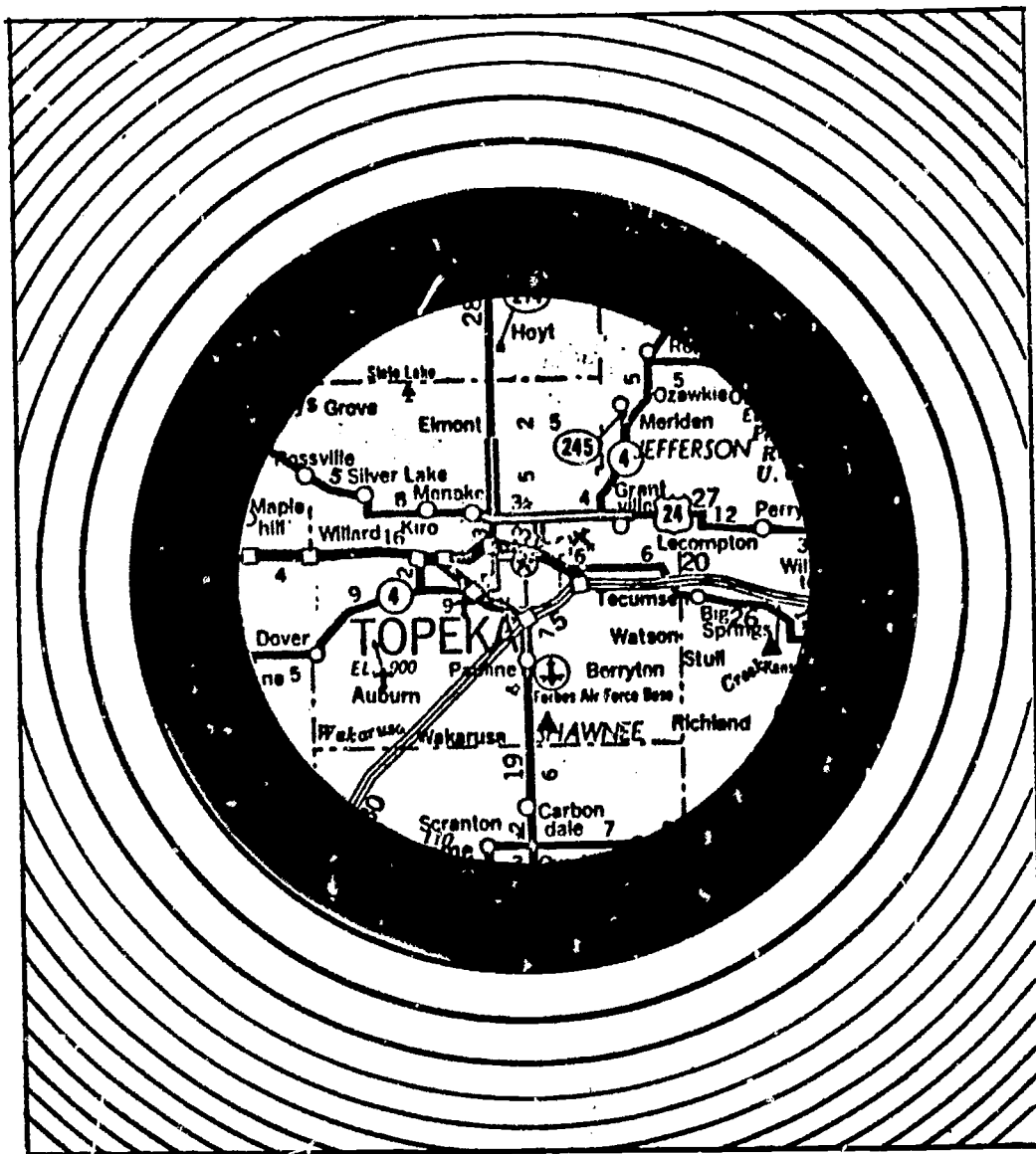
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PART OF A KANSAS STATE UNIVERSITY SERIES ON COMMUNITY  
PLANNING AND DEVELOPMENT, THIS MONOGRAPH DESCRIBES AND  
DEFINES THE NATURE OF URBAN CENTERS AS PHYSICAL ENTITIES.  
BASIC LAND USE CATEGORIES AND SUBDIVISIONS, FUNCTIONAL  
CLASSIFICATIONS OF COMMUNITIES IN THE UNITED STATES  
(MANUFACTURING, RETAIL, WHOLESALE, DIVERSIFIED,  
TRANSPORTATION, MINING, UNIVERSITY, RESORT AND RETIREMENT),  
AND BASIC URBAN FORMS (CONCENTRIC ZONES, SECTORS, MULTIPLE  
NUCLEI, LINEAR FORM) AND COMPOSITES THEREOF, MARKED BY  
VARYING PATTERNS OF COMMERCIAL, INDUSTRIAL, AND RESIDENTIAL  
DEVELOPMENT, ARE PRESENTED AS A FRAMEWORK FOR ANALYZING THE  
PHYSICAL CHARACTERISTICS AND NEEDS OF COMMUNITIES. THE  
PHYSICAL AND SOCIOECONOMIC CAUSES OF URBAN BLIGHT ARE THEN  
DISCUSSED, TOGETHER WITH THE PROBLEM OF EVALUATING BLIGHT AND  
CORRECTING IT. THE AUTHOR CONCLUDES THAT, IN ORDER TO MEET  
EXISTING PHYSICAL NEEDS AND PROVIDE FOR FUTURE GENERATIONS,  
AMERICAN CITIES MUST HAVE PROMPT AND EFFECTIVE GOVERNMENT  
ASSISTANCE, FINANCIAL AND OTHERWISE, AT ALL LEVELS. THE  
DOCUMENT INCLUDES FOUR ILLUSTRATIONS, A LAND USE MAP OF  
MANHATTAN, KANSAS, AND EIGHT REFERENCES. (LY)

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# THE PROCESS OF URBANIZATION

## The Physical Aspects

KANSAS STATE UNIVERSITY

DIVISION OF CONTINUING EDUCATION  
COLLEGE OF ARCHITECTURE & DESIGN

CENTER FOR COMMUNITY  
PLANNING SERVICES K.S.U.

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"THE PROCESS OF URBANIZATION"

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THE PHYSICAL ASPECTS OF URBANIZATION

Physical Considerations in Community Action

by

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April 1967

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## PHYSICAL PERSPECTIVES ON URBANIZATION

### URBAN PHYSICAL SETTINGS FOR ACTIVITIES:

It is the purpose of this section to describe and define the nature of the urban center as a physical entity. It is in discussing the "physical community" that we want to understand the unique physical attributes which "separate it and set it apart" from its hinterland or surrounding area. It is in viewing the physical structure of an urban center that the citizens of a community have only to look about themselves to see the process of growth or decay in action. To comprehend physical reality, it is important that we understand the physical as an "end-product", "effect" or a "manifestation" and subsequently the "setting" for on-going social political and economic activities in the community. It is the unique character of this interaction which establishes the pattern of the urban center and in turn gives its substance and form.

### LOCATION OF URBAN CENTERS

Communities have located and developed because of certain natural and societal factors, such as:<sup>1</sup>

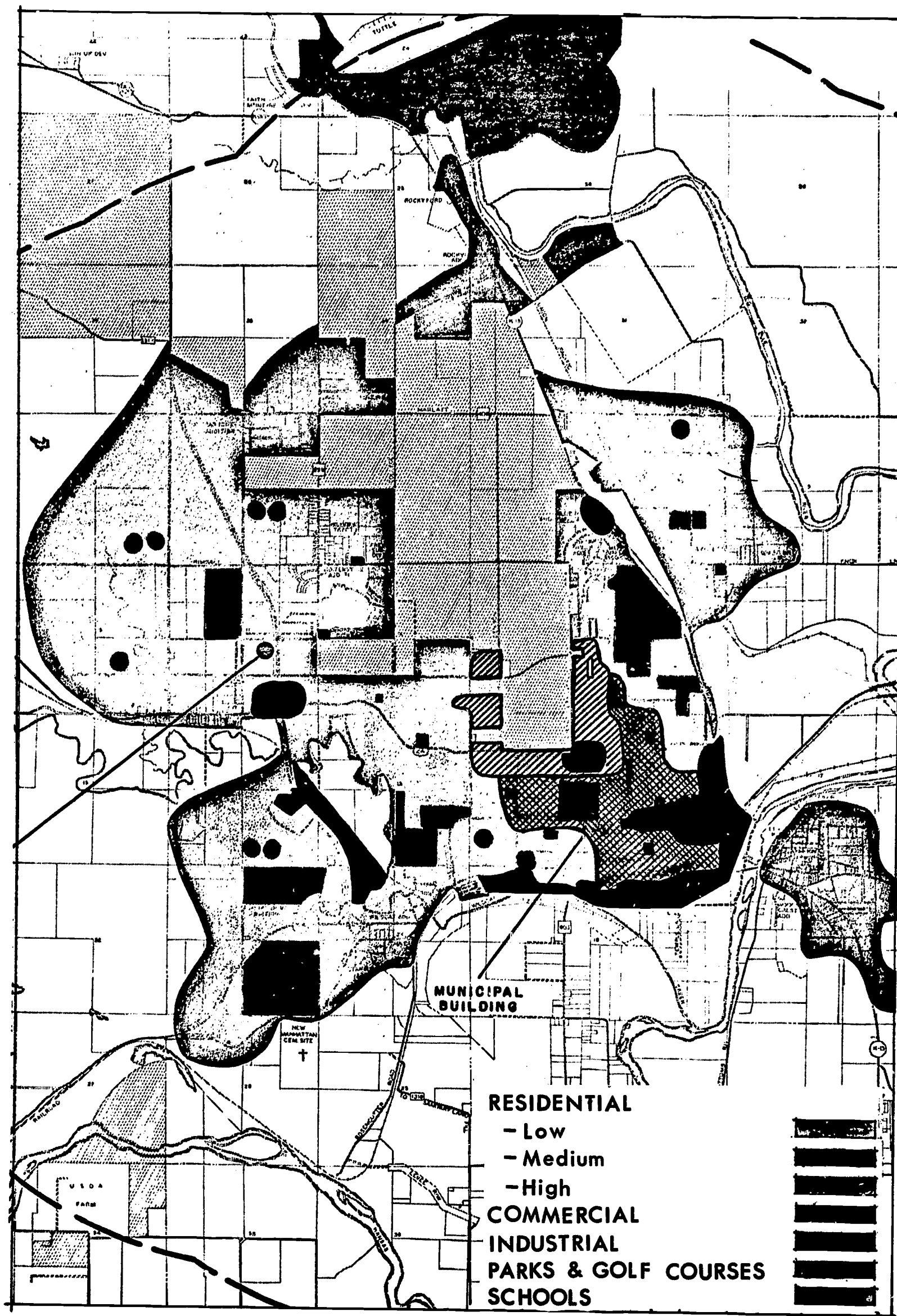
1. Breaks in transportation -- Sea, lake, or river ports, river junctions or rapids, route intersections, foot of mountains, passes, fords, or bridge points, or transportation servicing points such as refueling locations.
2. Industrial sites -- Most advantageous combination of raw materials, power sources, labor, climate, access to markets.
3. Nodal points -- Most advantageous with respect to several features such as a crossing of several routes and clustering of industries.

#### DIVERSITY WITHIN URBAN CENTERS

An urban center, if it does one thing, represents diversity, because, in a sense, it polarizes activity for a surrounding area or region. It represents, separately or in combination, such things as government, employment, trade, financial, medical, education, and transportation activities. These are but a few of the activities which can and do take place in urban centers. However, it should be noted that diversity is a function of community size and type. It is readily apparent to an observer that the nature of the diversity of Kansas City is of a significantly higher order than that of a rural-urban center in the state. It is because of an urban center's diversity that "attraction" or "influence" over surrounding areas is exerted. Needless to say, all of this diversity and activity requires space for physical facilities and location.



**FIG. 1      GENERALIZED      LAND      USE (MANHATTAN)**



To illustrate, let us picture, for the moment, an urban center two-dimensionally on a map and assign colors to various activities or land uses. If we do, we can see at a glance, the distribution and types of activity which are present in a community, and at the same time assess the community in terms of its scale of activity. (Figure 1)

#### BASIC LAND USES

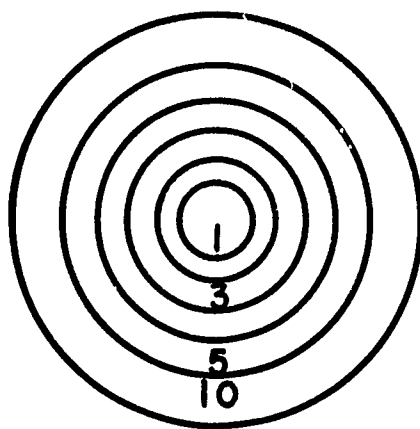
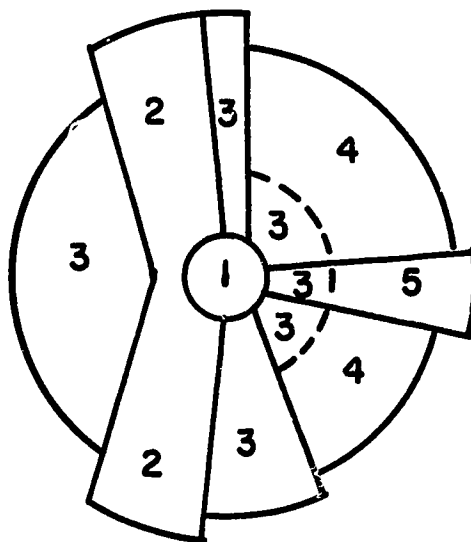
Most communities in the United States, by way of "micro-analysis", classify their land into five basic or major categories: residential, commercial, industrial, public and quasi-public. These individual categories are themselves then subdivided into related uses ranging from the most to the least desirable, from the most to the least restricted, from the highest to the lowest density. The number of land-use classifications between the most intense use and the least intense will vary differently from community to community depending on its size and complexity. In our large metropolitan area there are numerous classifications and subclassifications of land use, while in the average rural-urban community there may be less than eight or nine individual classifications. This more limited number of classifications in smaller communities reflects a less complex pattern of land use and not a lack of accuracy in determining land use.

It should, however, be noted that most all urban centers, regardless of size, provide the basic functions associated with land-use activity necessary to maintain the functional integrity of community life, but that the range of diversity within each category and the factor of specialized land uses increases in more-or-less direct proportion to the rate of growth of the community. The understanding of an urban center's land use not only provides necessary information concerning its physical structure, but also provides vital information with respect to the increasing or decreasing rate of growth in an urban center's physical plant and in its various categories of land use. It also provides a convenient yardstick of measurement for determining the quantity, type, and most appropriate location for various uses with respect to future development. Land use distribution, in the "macro-sense", also establishes and determines to a great extent urban form, as suggested by the following discussion concerning urban forms.

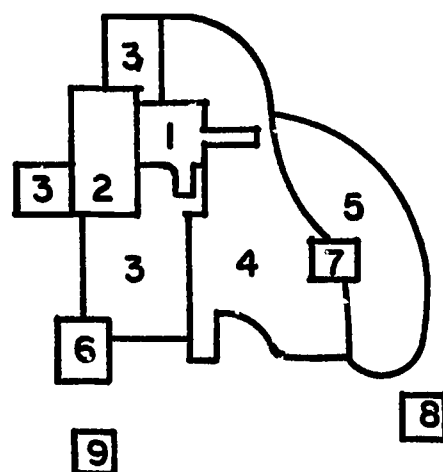
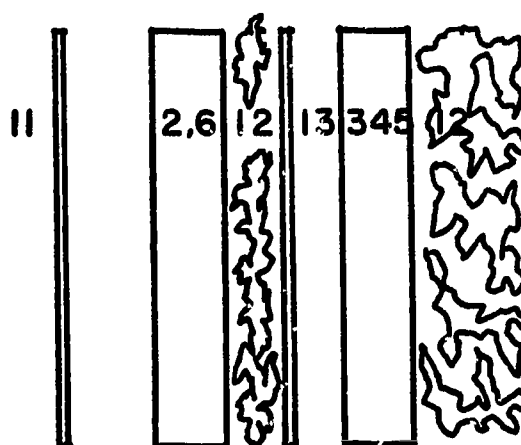
## URBAN FORMS

There are four basic urban forms which are generally descriptive of urban patterns of physical development. They should be considered "as models" and not as absolute structures of urban form because communities are, in general, a combination or composite



FIGURE 2CONCENTRIC ZONE THEORYFIGURE 3SECTOR THEORYDISTRICTS:

- 1 CENTRAL BUSINESS DISTRICT
- 2 WHOLESALE LIGHT MANUFACTURING
- 3 LOW-CLASS RESIDENTIAL
- 4 MEDIUM-CLASS RESIDENTIAL
- 5 HIGH-CLASS RESIDENTIAL
- 6 HEAVY MANUFACTURING
- 7 OUTLYING BUSINESS DISTRICT
- 8 RESIDENTIAL SUBURB
- 9 INDUSTRIAL SUBURB
- 10 COMMUTERS' ZONE
- 11 RAILROAD
- 12 GREENBELT
- 13 HIGHWAY

FIGURE 4MULTIPLE NUCLEIFIGURE 5LINEAR THEORYDISTRICTS:

- 1 CENTRAL BUSINESS DISTRICT
- 2 WHOLESALE LIGHT MANUFACTURING
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- 12 GREENBELT
- 13 HIGHWAY

of these "models" rather than a replica of any of them singly. However, they are useful for study and discussion purposes. 2 (Figures 2 to 5)

(1) CONCENTRIC  
ZONE THEORY:

The Concentric Zone Theory of urban form was first developed by Ernest W. Burgess in which he visualized the community as comprised of a series of concentric circles or zones. At the center is located the Central Business District; contained within it are the major shops and department stores, hotels, theaters, office buildings, banks, government offices, and other business enterprises requiring a central location. It is within this core that the major concentration of a community's commercial, cultural, governmental and transportation facilities are located. Adjacent to the CBD are located other commercial functions of the community. In this zone are found the older market, wholesale, and warehouse districts. This zone had been often termed a "zone in transition" or "gray area" because it is a zone indicative of changing uses and activities. It contains in most cases, a slum or blighted area because of its mixed and changing uses. This mixture of slums and mixed land uses has occurred over the years primarily due to the fact that while certain segments of the population from these areas, namely

the white population, has been able to extricate itself from this environment, the Negro population and other low-status classes have not. There has also been, within recent years, a high influx of low socioeconomic groups of both white and Negro origin, into these areas from many parts of the country seeking new opportunities, only to be sadly disappointed in their search.

Changes in uses and intensity of use have contributed greatly to the problems of physical deterioration within this zone, coincidence with a notorious lack of enforcement with respect to zoning and code restrictions. Therefore, these areas have become a hodgepodge of high density low-class residential, commercial and industrial uses each vying with the other to the detriment of all. Zone number three composes the residents of the "blue-collar workers" who have over a period of time moved from the "zone in transition" but still require ready access to their source of employment and other central city activities. Zone number four largely comprises the residents of the "white-collar" and lower middle-class families. Zone number five corresponds to what is today called suburbia, and it is

where the higher middle class and higher income groups live. Stretching out beyond this zone is what is known as the commuters' zone. The commuter zone is comprised of residents who generally live outside the political boundaries of the community and live in satellite communities, but work, shop, and often seek recreation in the larger community.

(2) SECTOR  
THEORY:

This theory of urban form developed by Homer Hoyt, concerns itself with a radial pattern of development along main arteries of transportation. The community is considered to be a circle with similar types of land use originating and radiating out from the center or core toward the boundary of the community in the same direction and in the same groupings. For example, a particular type of high cost residential development once started in a certain sector concentrating and moving out in the same general direction within that sector. It has been found according to this theory that the various income groups which make up the community's population tend to segregate and be found in very distinct areas. These areas form radial sectors which are focused on the community's center.



It has been found that high-rent areas in communities in the United States have tended to originate near the CBD and have had a strong and controlling influence on the direction residential growth has taken. In the American communities, conforming to this type of urban form, the process of urban growth tended to be controlled by the following nine conditions.<sup>2</sup>

1. High-grade residential growth tend to proceed from a given point of origin along established lines of travel or toward another nucleus of buildings or trading centers.
2. The zone of high-rent areas tends to progress toward high ground that is free from floods and to spread along lakes, bay, river and ocean fronts--unless such water fronts already are used by industry.
3. High-rent residential districts tend to grow toward the section of the city that has open country beyond and away from "dead end" sections that are limited by natural or artificial barriers to expansion.
4. Higher priced residential neighborhoods tend to grow toward the homes of the leaders of the community.
5. Trends of movement of office buildings, banks, and stores pull the higher priced residential neighborhoods in the same general direction.
6. High-grade residential areas tend to develop along fastest transportation lines.
7. The growth of high-rent neighborhoods continues in the same direction for a long period of time.

8. "Deluxe" high-rent apartment areas tend to be established near the business center in old residential areas.
9. Real estate promoters may bend the direction of high-grade residential growth.

(3) MULTIPLE  
NUCLEI CONCEPT:

As a concept of urban form, this theory is a departure from the previous two insofar as the concentric zone and sector theories have as a basis of growth a single center or core. This concept of urban form sees the community in terms of several centers or nuclei serving as an impetus for various arrangements and concentration of land use. The reasons for the development of these separate and independent nuclei demonstrates a certain coalescing of factors. This theory reflects the phenomenon of symbiosis and segregation. Symbiosis is the tendency for functionally related activities to locate in physical proximity to one another such as; hotels, restaurants, theatres and night clubs, while segregation is the tendency for differing peoples and functions believed to be incompatible to sort out and locate in mutually exclusive areas.<sup>2</sup>

1. Some activities require specialized facilities. For example, the retail district is attached to the point of greatest accessibility.

2. Some activities form a group because they profit from a cohesive location. Retail districts benefit from a grouping that increases the concentration of potential customers. Financial and office buildings reflect the importance of grouping and easy communication among offices within a given area.
3. Some activities are detrimental to each other. The clash between factories and expensive residential apartments is an obvious illustration. Heavy concentration in the heart of a retail district are in conflict with wholesale activities requiring vehicular and rail-loading facilities.
4. Some activities are unable to afford the high rents of the most desirable sites--for examples, bulk wholesaling or storage activities requiring extensive space.

#### (4) LINEAR THEORY:

This theory of community development is possibly as old as communities themselves and in a sense is very characteristic of many Kansas rural-urban settlements. Its basic feature is that the whole community including industrial, commercial and residential growth is stretched out along a main line of transportation (a highway, a river, a harbor) with filling in occurring along these routes. These are called "line settlements".

#### TYPES OF URBAN CENTERS:

The functional purpose of communities has already been stressed in the economic section, however, let us once again restate this in terms of physical

importance. Functionally communities developed primarily to undertake economic activity which in turn provided employment for its working population. However, communities have evolved functionally to the point where the functionality of a community must be structured to satisfy the social needs of the population.

Chauncy D. Harris, a student of urban studies, developed the following nine functional classifications of communities in the United States:<sup>3</sup>

1. Manufacturing (1st group): 74 percent of total employment engaged in manufacture, wholesaling and retailing, with 30 to 45 percent of all workers in manufacture and mechanical work.
2. Manufacturing (2nd group): 60 percent of total employment engaged in manufacture, wholesaling and retailing, with 30 to 45 percent of all manufacture and mechanical work.
3. Retail: 50 percent of total employment in manufacture, wholesaling and retailing, but the number in retailing being 2.2 times greater than the number in wholesaling.
4. Diversified: 60 percent of total employment in manufacture and 20 percent in wholesaling, or 50 percent in retailing. Manufacture and mechanical work is usually 25 to 35 percent of the employment.
5. Wholesale: 20 percent of total employment in manufacture, wholesaling and retailing and at least 45 percent in retailing alone.

6. Transportation: 11 percent of total employment in transportation, which must be one-third the number in manufacture and two-thirds the number in trade.
7. Mining: Cities over 25,000 having 15 percent or more of the employment engaged in the extraction of minerals.
8. University: Cities of 10,000 or more having 25 percent of the population occupied as teachers or students.
9. Resort and retirement: Cities having no special criteria for identification.

From the standpoint of a community's physical plant almost all of it is concerned with these activities or those employed in them. It is in terms of physical structures, land-use patterns, transportation networks and conveyances that a community is ultimately described physically in appearance. Consequently, the greater its functional or economic diversity the more elaborate its physical complexity and appearance. (Manhattan vis-a-vis Kansas City)

**PHYSICAL  
PROBLEMS:**

The foregoing has been a brief discussion of some of the physical characteristics of communities with respect to land-use, forms, location and function. Of immediate concern, however, both to community leaders and citizen alike is the overwhelming nature of some of the following physical



problems facing urban communities today.<sup>4</sup>

## Urban Blight

Physical decay and neglect has rooted itself deeply into our urban environment regardless of whether that environment is metropolitan or rural. Blight has spread its shadow to such a noticeable extent in our urban centers that it has motivated government, at least at the national level, to undertake corrective action. Blight has been encouraged and allowed to spread because of the lack of responsibility on the part of state and local governments, negligent urban maintenance and the inability in enforcing proper controls on the part of local government. The effects of blight are more than just monetary, it has impaired health, bred crime and delinquency, brought traffic death and injury, eroded civic pride, threatened municipal bankruptcy, and has had a deteriorating effect on the human mind and nervous system.

## Causes of Blight

It is generally agreed by most urban scientists that there are two basic characteristics associated with blight: substandardness and stagnation or deterioration, resulting from a complex interrelationship of physical, economic, and social forces present in a community, which demonstrates a lack of planning on the part of the community. Blight is the product

of such conditions as the lack of adequate light, heat, ventilation, privacy, inadequate recreational and living space, excessive noise and dirt, mixed land-use and a host of other causes which produce unsatisfactory living and working conditions.

Blight in other areas such as commercial and industrial locations also has its presence revealed in the form of mixed land-use, traffic congestion, pedestrian conflict, noise, dirt, smog, poor and improper street design, lack of adequate transportation facilities, design and construction of buildings, sanitation facilities and safety hazards. The cause and effect relationships of blight seem to be circular once it has set in and it becomes increasingly difficult to distinguish what are causes and what are effects. The above discussion does not preclude the notion of some planned diversity. What it does highlight is the fact that in areas of multiple land use, there should be no conflict between or among them.

Blight which is characterized by the dilapidated condition of physical structures is principally the result of neglect or inadequate original construction. If buildings are poorly designed and constructed and they lack functional flexibility over a period of time, their utility is greatly impaired. Buildings may over

a period of time become inadequate due to lack of flexibility and neglect. Neglect has a tendency to reproduce and spread throughout an area encouraging further decay and destruction of the living environment. The responsibility for which is due to the attitudes and practices of property owners and local government. Primary among poor planning practices on the part of municipal authorities in urban areas has been the consistently inappropriate use of land or mixed land use development. The conflicts between residential and nonresidential uses in a limited geographical area has always had a deteriorating and blighting effect whenever and wherever they have been found. You cannot locate residential, industrial or commercial uses in close proximity to each other without controls of some type on their use and expect harmonious relationships, because usually the requirements of each tend to make them mutually exclusive. Other malpractices which have contributed to blight include the lack of: providing proper density controls with respect to people and buildings, educational and recreational facilities, site planning, updating and enforcing building codes and ordinances, and the lack of providing enlightened and socially constructive rehabilitation programs for underprivileged minority groups.

It is sometimes difficult to separate the causes of blight due to economic factors from those due to neglect and lack of proper local governmental planning. In a great many cases blight is due to the neglect of landlords who make their living from the rental of dilapidated slum properties who are unwilling to spend money on the maintenance and upkeep of their properties. The tenants who occupy these properties are themselves unwilling or unable to afford the cost of improvement. As a consequence of this, buildings are allowed to deteriorate and fall into disrepair because of the lack of proper maintenance. Often the buildings and surrounding yards are allowed to progress to such a state of dilapidation that they pose a definite fire hazard. Much of this could be corrected with a little bit of effort and interest on the part of the owners and tenants alike. However, once the blighting influences have set in, the only things which seem to halt and reverse their effects is an organized effort on the part of a community's citizens and local government through some sort of action program.

The condition and extend of blight is not always a function of community size. Certain of the above-

mentioned criteria of blight are also applicable to smaller rural-urban communities, depending on the special characteristics and structure of the individual rural-urban community. Blight in terms of physical deterioration in many of these specific types of communities takes the form of the lack of replacement and maintenance of facilities, improper utilization of existing facilities. There is also a great deal of what would be considered substandard housing in these rural-urban communities. It seems that regardless of community size, there is always that "pocket of blight" to contend with.

The percentage of new construction in many of these communities during the past twenty-five or thirty years has been indeed negligible. This is due, in most part, to the exodus or static nature of the population in these communities, which in turn has reduced the need for new facilities and has dried up the sources of investment capital to undertake new construction. Population reduction or stagnation has also created high vacancy rates in many communities' business districts and outlying rural areas. Many of these structures still exist unoccupied and because of this are poorly maintained and allowed to deteriorate causing blight.



Many of the buildings currently being used, especially in the central business district because of the shrinkage in volume of sales, have not been upgraded in terms of equipment and appearance. This is also true of public facilities such as streets, municipal parking lots, water and sewage facilities, parks, playgrounds, and municipal building of various types. The reasons for this being that these communities at present have a limited or shrinking tax basis from which to draw revenue which would allow them to set aside a portion of it for new construction. They are also limited by the requirements of their bonded indebtedness imposed on them by the state. Another factor discouraging new construction has been the annual increase in the cost of new construction to the point where it is becoming increasingly prohibitive. Increasing public demand for community service and the cost of these services has left many communities walking a narrow path between solvency and bankruptcy with little fiscal capability for present or future community development.

As far as the communication among the various levels of state, county and local government is concerned, there has too often been what might be termed a "communications vacuum". This has resulted in a lack

of coordination and a mutual understanding with respect to the problems of planning such things as: the location of highways, educational and recreational facilities, airports, conservation areas, irradiation of water pollution, the providing of adequate water supplies, and the establishment of public health and welfare programs. This is to name but a few of the areas of planning where better inter-governmental communications are vitally needed.

#### The Measurement of Blight

There is a great deal of controversy concerning the determination of what should be considered the minimum standards and requirements for measuring blight. Determining the condition of substandardness of buildings is relatively easy to identify by the nature of their design, structural condition, equipment, and the nature of their care and maintenances. Certain standards with respect to land and land subdivision can be generally determined such as, size and shape of individual lots, permitted densities, requirements and provisions for community facilities, utility service transportation, recreation, location and accessibility to shopping districts, and necessary provisions for new and expanding uses. It should be noted that while buildings and certain areas within

the community may be deficient or substandard in certain of these respects it does not necessarily follow that these areas are blighted.

The determination of blight is not merely a cataloguing or the applying of a series of indicators. It is determined by a rather complicated interweaving of socio-economic factors. This is what makes it so difficult to eradicate. To strike at the heart of blight it is necessary to untangle this complex relationship, which is admittedly a difficult task. In general, a blighted area is an economic liability to any community. The measure of economic liability itself is not easy to calculate. The matter of tax revenues and governmental expenditures are easy enough to determine. However, there are certain intangible factors which are not readily measurable and do not appear in any financial balance sheet such as the livability of an area, cost of inconvenience and frustration, and the cost of the effects of congestion, improper or poor location, and the undue loss of time and energy.

While there are many acceptable criteria for determining substandards for buildings and conditions of blight, there is much that has to be determined subjectively about it. Therefore, it is advisable that

qualified persons be employed to make valid subjective surveys and to rely on their professional judgment when and where necessary. Surveys of buildings and land use, of course, do not necessarily give a complete picture concerning blight. There are many economic and social factors which must also be considered. A certain degree of success has been achieved in this area by the establishment of indices which measure the extent and conditions of blight through analysis of economic and social cost based upon the study of certain statistical information which compares one area with another.

At this point I would like to comment on our past and present urban planning performance, and what is necessary if we are to accomodate our future urban populations.

It is estimated by 2000 AD that our population will be approximately 330 million people.

If we are to physically accomodate 150 million more people in our future populations, then the entire structure of our urban complexes must undergo a traumatic metamorphosis. I suggest the seriousness and magnitude of this task by deliberately choosing the word traumatic. If we are to be adequately prepared physically for this increased population, especially

in light of the time it has already taken us to build and establish the physical plants of our present cities, the task of marshalling the necessary resources and talents to meet this challenge, for a population that will nearly double in the next 33 years, will be, in my estimation, truly traumatic.

#### CRISIS PLANNING:

Efforts previously expended in meeting physical demands over the last 200 years will have to be accelerated and compressed into a time period (1967-2000) that will definitely test our capacity to innovate and to come up with pragmatic solutions to our physical planning problems. If we contemplate using as a guide our previous planning performances in this direction during the past 25 years, I am afraid that we will find ourselves sadly in want of proper and appropriate planning solutions to the emerging physical problems of urbanization.

Much of what we have done and are doing is "crisis planning". By this I mean that we are meeting physical planning situations on a "crisis by crisis basis". In doing so, we have not had the luxury of time to make certain of our directions nor have we been able to properly evaluate the merits of our course of action. We are somewhat like a sea captain seeking the refuge of "any port in a storm". There is a great deal of



confusion as to what our direction should be, what national goals we should establish for ourselves, and who is responsible for establishing these goals. Most of all, we are confused as to who is responsible for initiating remedial projects and should bear the financial burdens in supporting the projects.

TRANSPORTATION  
PLANNING:

Indicative of our confusion and frustration is the fact that no sooner do we construct an elaborate urban freeway system than we find the number of passengers per vehicle declines and the number of vehicles moving on the expressway increases which only compounds our problem. San Francisco recently threatened to tear down newly constructed parts of their freeway system because they could no longer satisfactorily cope with the insatiable desire for urban parking space demanded by the automobile. What is true of San Francisco is also true of many of our large urban areas. We are currently in the process of building a tremendously expensive interstate highway near urban centers which is literally inundating these areas in a sea of automobiles. If it were possible to compute nationally all the direct and indirect costs related to the control, movement and storage of automobiles during a single year which cities are required to bear, we would be literally overwhelmed by the

sheer magnitude of these costs. The really disheartening fact about transportation planning is the fact that we have not begun to solve the problems of traffic congestion in our urban areas.

#### PLANNING FOR PUBLIC FACILITIES:

The increasing expenditures of public funds for facilities such as schools, bridges, water and sewage disposal systems, roads, recreational spaces, airports, police, and fire protection seems to be mounting geometrically. The general public has an insatiable desire for additional services. It has been estimated that new public construction for the year 1965 ran in excess of 25 billion dollars or approximately 3.8% of our GNP. This represents a sizable public investment in physical facilities, however, the fact remains that we are far from keeping pace with present demands. Our major problem is painfully clear. How do we "break even" in a situation like this and still gain the necessary momentum and financial resources to plan for the inevitable needs of our future populations?

#### CONCLUSIONS:

If our urban centers are to have any chance of coping with their present physical needs in addition to preparing for future generations, they must receive.

active and adequate governmental assistance immediately. The chaotic physical development and stresses put on the physical plants of cities like Los Angeles is well known. California is absorbing an out-of-state population of 3000 people a week. This tremendous stress is also true, in varying degrees, for a majority of our urban areas which have been experiencing rapid population growth. These cities within states that are experiencing rapid population expansion must, if they are to survive with any semblance of order and balance, receive this type of assistance. By governmental assistance, I mean active, comprehensive and integrated, and technical support from all levels of government. It is not always necessary that this type of assistance take the form of monetary aid. Regardless of whatever form assistance takes or who administers it, it should stress an overall approach which will attempt to mitigate the social, political and economic pressures which are contributing to the physical deterioration of our urban centers.

PHYSICAL SECTION:

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